

Leukaemia Immunophenotyping (Part 1) Programme
All Participant Report

Sample - 151604

Distribution - 151604

Closing Date - 14 December 2015

Participant ID - 42981

Date Issued - 24 November 2015

Trial Comments

This sample was issued to 288 participants in the LI programme.

Sample Comments

Results and Performance

Overall Performance Grade (Core Antigens Only)	Performance Status for this Sample	Performance Status Classification Over 6 Sample Period	
		Satisfactory (Grades A-C)	Critical (Grades D-G)
C	Satisfactory	5	1

Please note performance monitoring for this programme is semi-qualitative and is based on the overall performance grade obtained from the consensus immunophenotype on the core antigens. The robust statistics and z-scores provided below are related to technical performance on individual antigens and are not used for performance monitoring. Derivation of z-scores requires normally distributed data and the results for this programme vary between normal and abnormal distribution based on the antigens and on a sample to sample basis. Therefore z-scores for antigens with expressions at the extremes of the results scale (around 0% and 100%) may not truly reflect the performance of the antigen and all z-scores should be viewed as for information purposes only.

Antigen	Your Results (%)	Your Result Antigen Expression (Positive/Negative)	Consensus Antigen Expression (Positive/Negative)	Robust Mean (%)	Robust SD (%)
CD2	0.00	-	-	0.00	0.00
CD3	0.00	-	-	0.00	0.00
CD5	95.00	+	-	0.00	0.00
CD13	0.00	-	-	1.26	1.45
CD19	13.00	+	-	15.81	6.45
CD20	0.00	-	-	0.00	0.00
CD10	0.00	-	-	0.00	0.00
CD79a	0.00	-	-	0.30	0.35
TDT	0.00	-	-	1.52	1.71
CD45	100.00	+	+	100.00	0.00
CD34	1.00	-	-	0.73	0.77
HLADR	100.00	+	+	97.78	2.27
CD15	90.00	+	+	63.67	35.87
CD38	95.00	+	+	93.76	6.33
CD22			-	5.82	6.66
CD117	0.00	-	-	0.00	0.00
Myeloperox	0.00	-	-	0.89	1.06
CD7	0.00	-	-	0.00	0.00
CD33			-	1.31	1.41
Cyto CD3			-	0.15	0.18
CD56	0.00	-	-	0.00	0.00

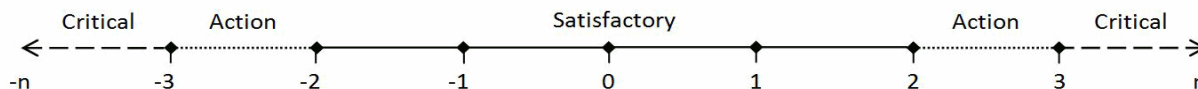
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Antigen	z Score*	Performance Status for this Sample	Performance Status Classification Over 6 Sample Period		
			Satisfactory	Action	Critical
CD2	0.00	Satisfactory	3	1	1
CD3	0.00	Satisfactory	4	1	0
CD5		Action	3	2	0
CD13	-0.87	Satisfactory	4	1	0
CD19	-0.44	Satisfactory	4	1	0
CD20	0.00	Satisfactory	4	1	0
CD10	0.00	Satisfactory			
CD79a	-0.86	Satisfactory			
TDT	-0.89	Satisfactory			
CD45		Action			
CD34	0.35	Satisfactory			
HLADR	0.98	Satisfactory			
CD15	0.73	Satisfactory			
CD38	0.20	Satisfactory			
CD22		Action			
CD117	0.00	Satisfactory			
Myeloperox	-0.84	Satisfactory			
CD7	0.00	Satisfactory			
CD33		Action			
Cyto CD3		Action			
CD56	0.00	Satisfactory			

***z Score Limits Definitions**

Please note the scale below is applicable to the tables above and to the z score histograms and Shewhart control charts that follow. It is not applicable to the Cusum control charts.



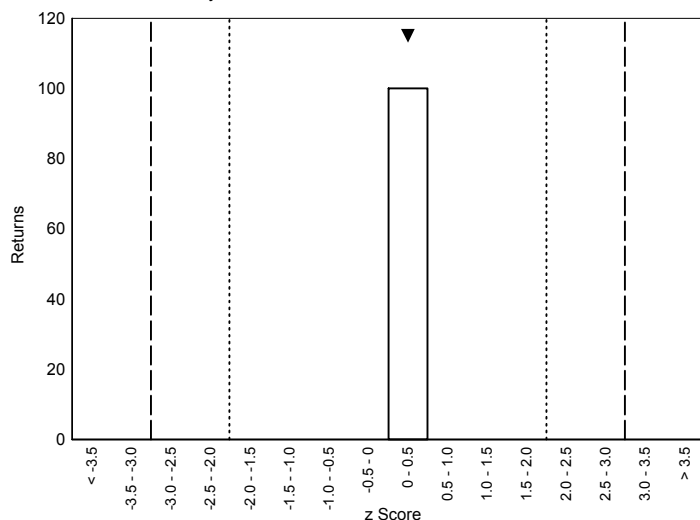
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Histograms of Participant z Scores

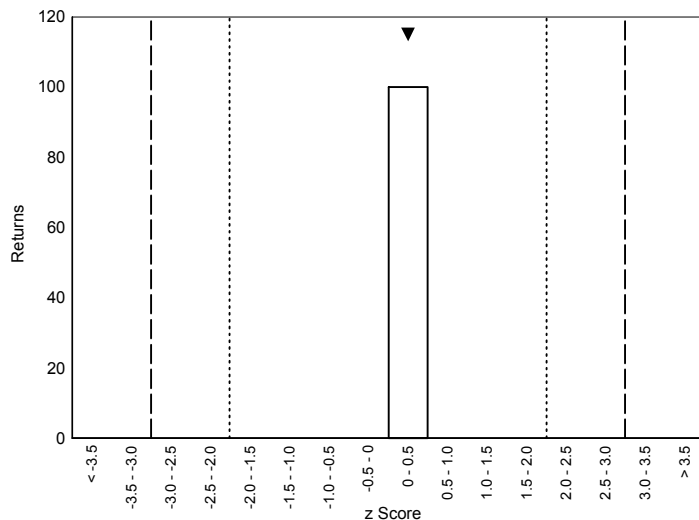
Percentage Values (%) - CD3

Please note ▼ denotes your result



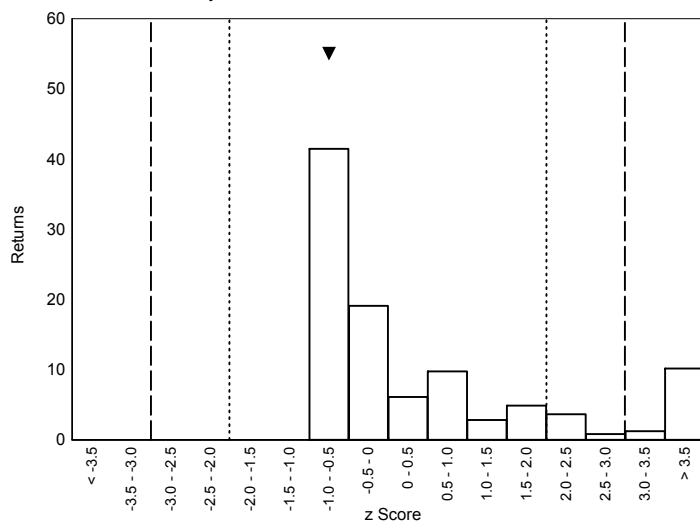
Percentage Values (%) - CD2

Please note ▼ denotes your result



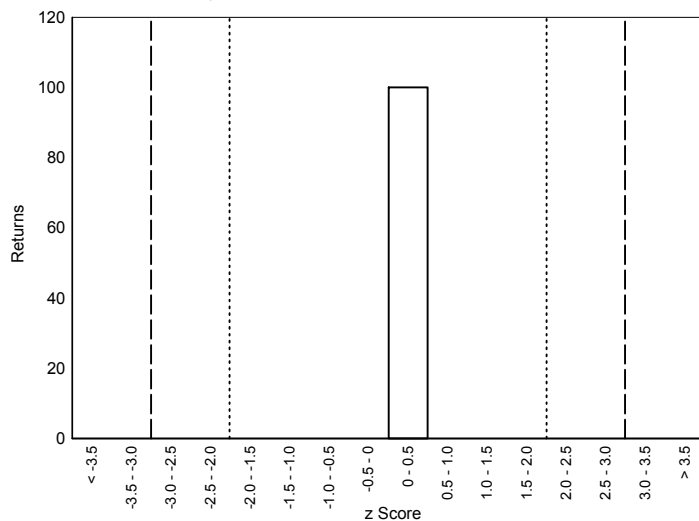
Percentage Values (%) - CD13

Please note ▼ denotes your result



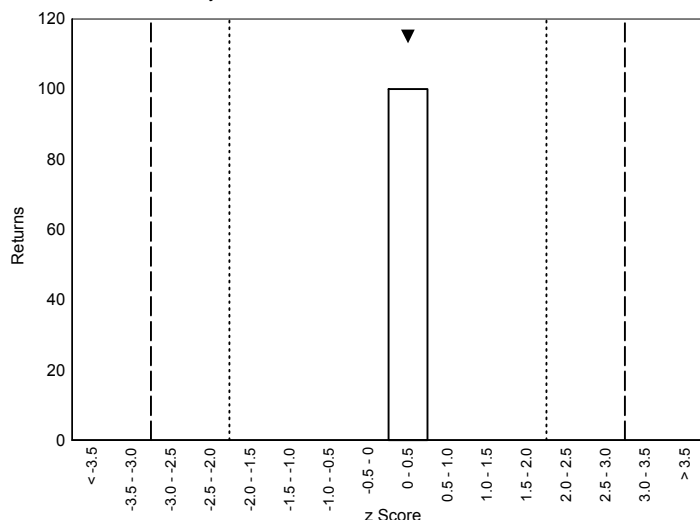
Percentage Values (%) - CD5

Please note ▼ denotes your result



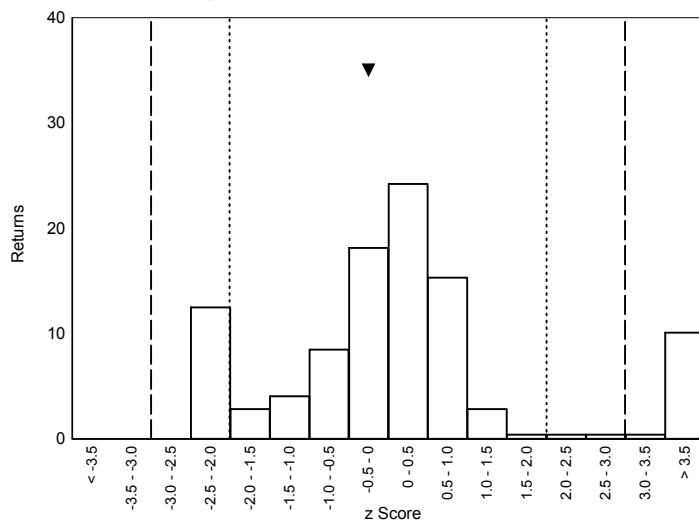
Percentage Values (%) - CD20

Please note ▼ denotes your result



Percentage Values (%) - CD19

Please note ▼ denotes your result



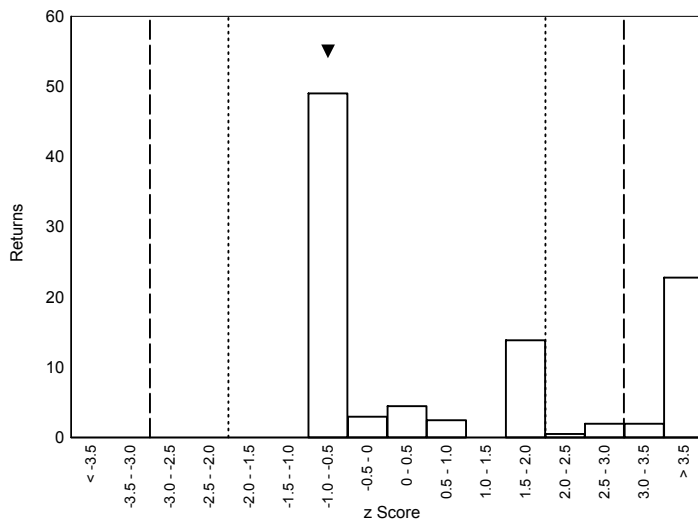
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Histograms of Participant z Scores

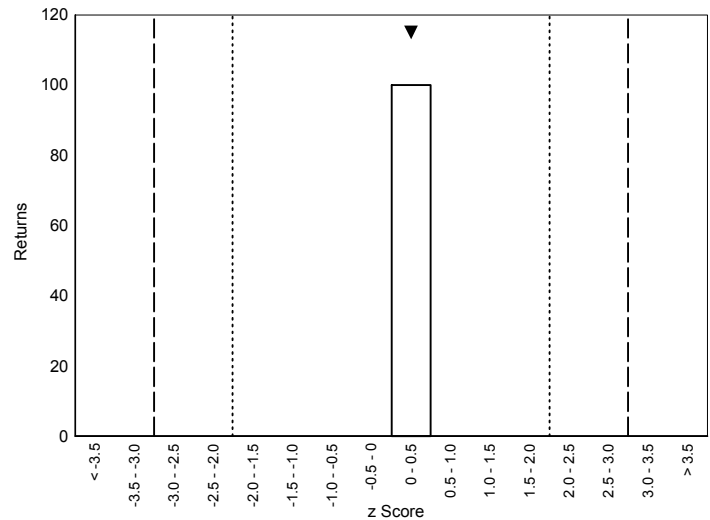
Percentage Values (%) - CD79a

Please note ▼ denotes your result



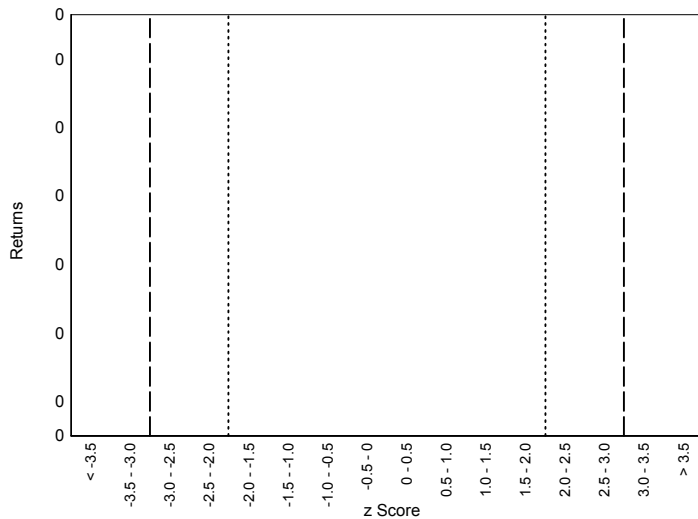
Percentage Values (%) - CD10

Please note ▼ denotes your result



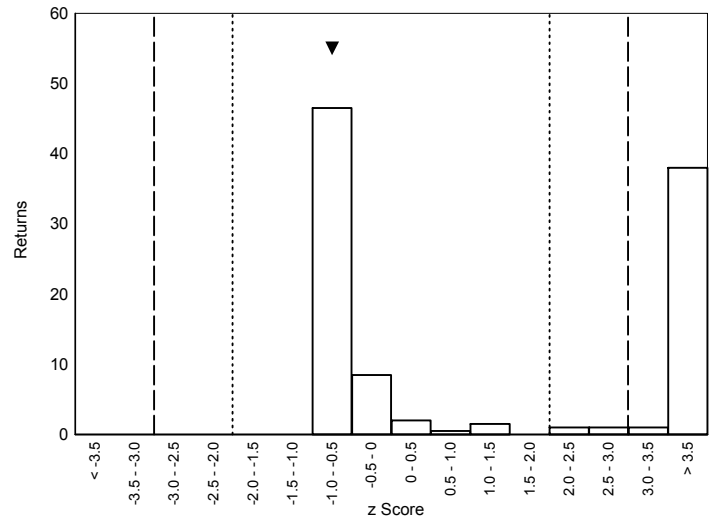
Percentage Values (%) - CD45

Please note ▼ denotes your result



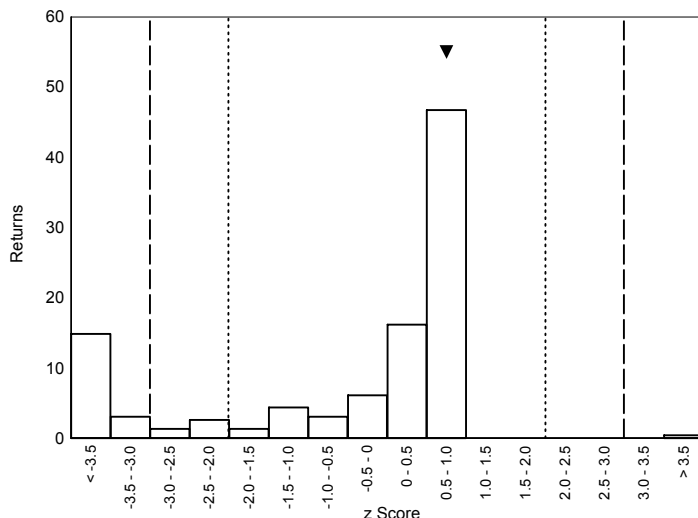
Percentage Values (%) - TDT

Please note ▼ denotes your result



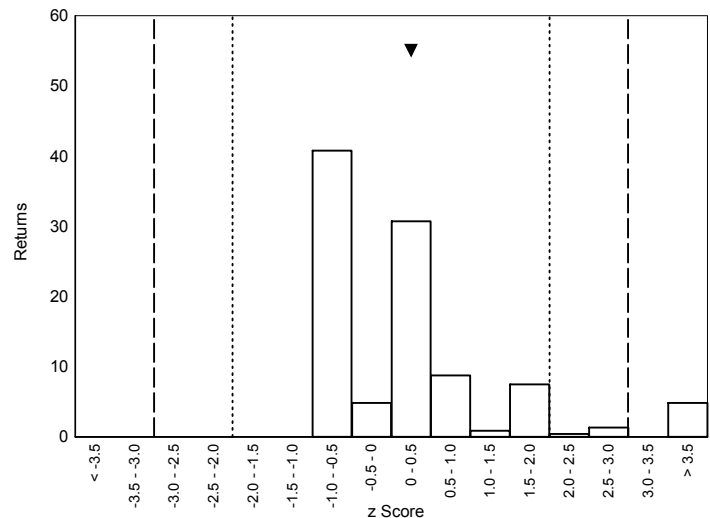
Percentage Values (%) - HLADR

Please note ▼ denotes your result



Percentage Values (%) - CD34

Please note ▼ denotes your result



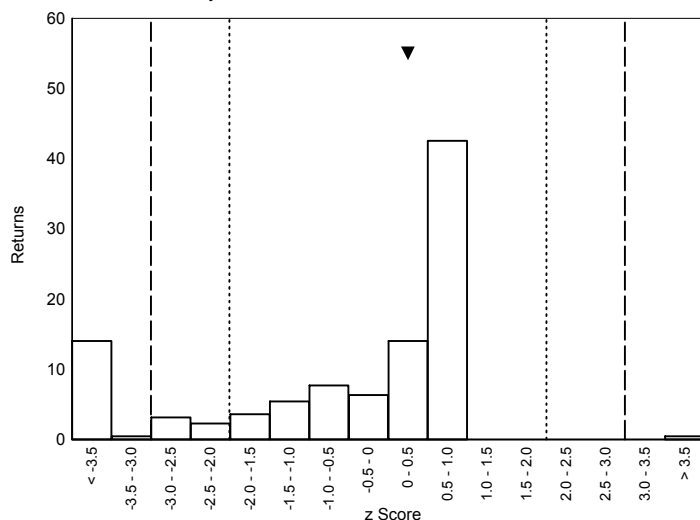
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Histograms of Participant z Scores

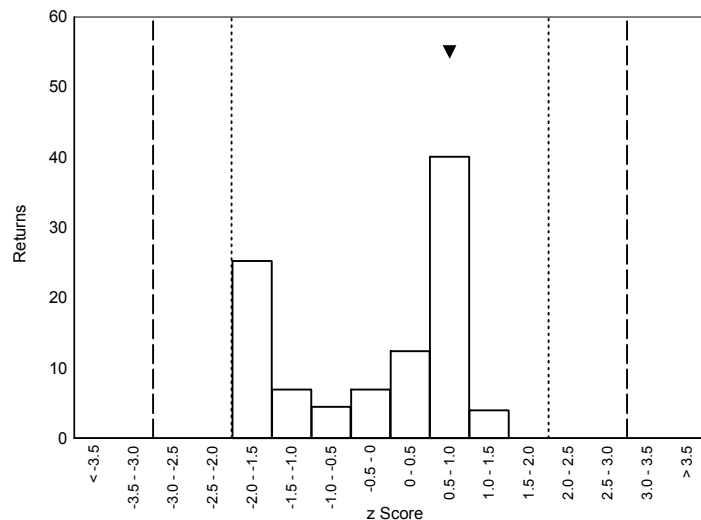
Percentage Values (%) - CD38

Please note ▼ denotes your result



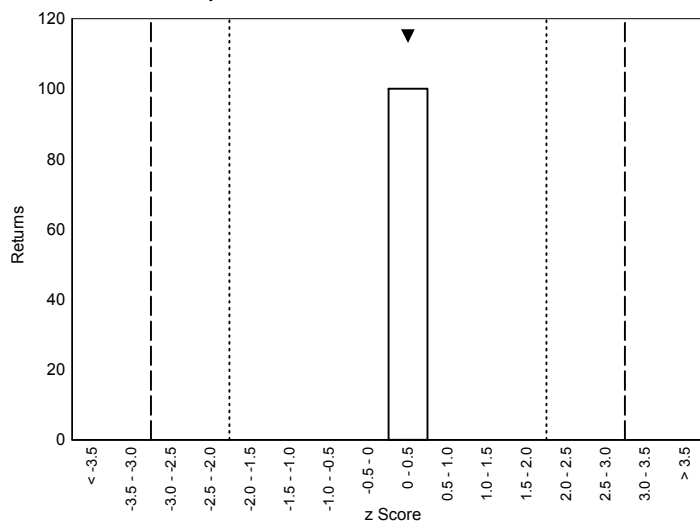
Percentage Values (%) - CD15

Please note ▼ denotes your result



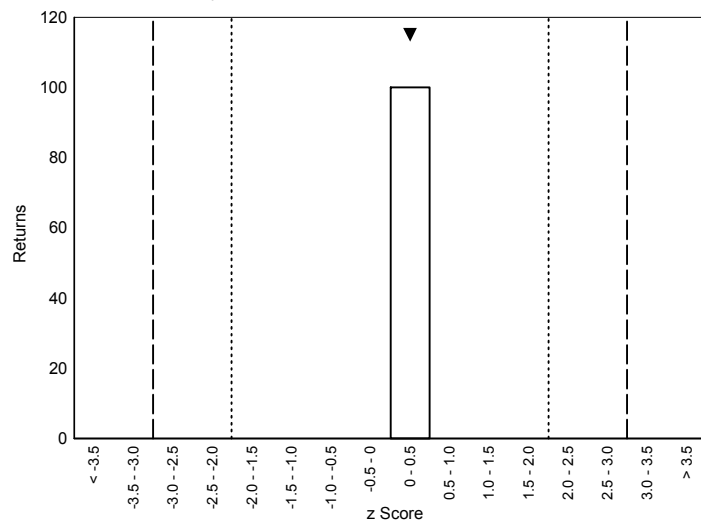
Percentage Values (%) - CD64

Please note ▼ denotes your result



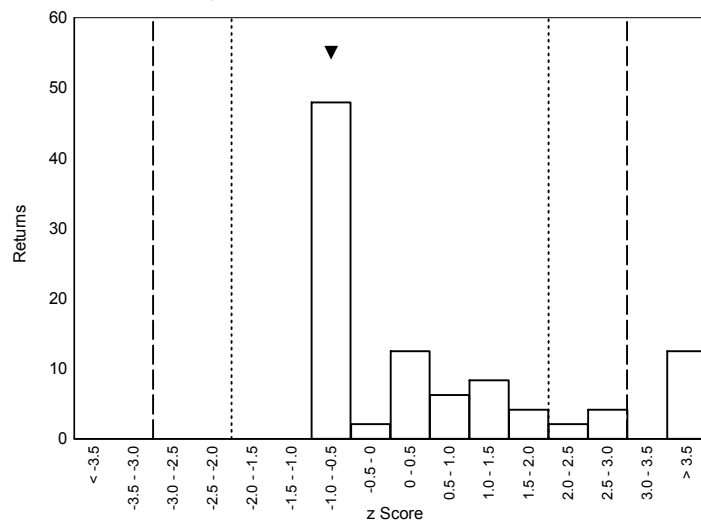
Percentage Values (%) - CD117

Please note ▼ denotes your result



Percentage Values (%) - Myeloperox

Please note ▼ denotes your result

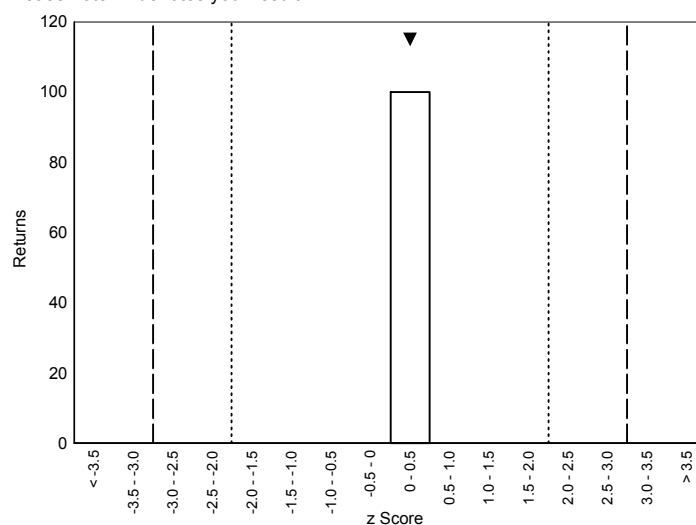


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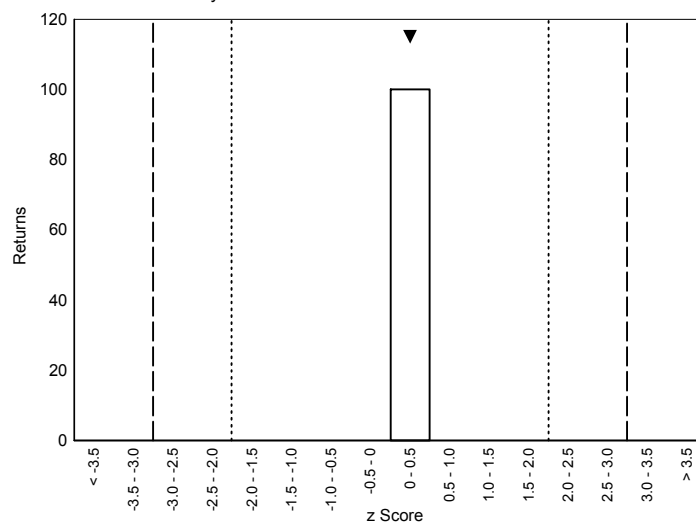
Percentage Values (%) - CD7

Please note ▼ denotes your result



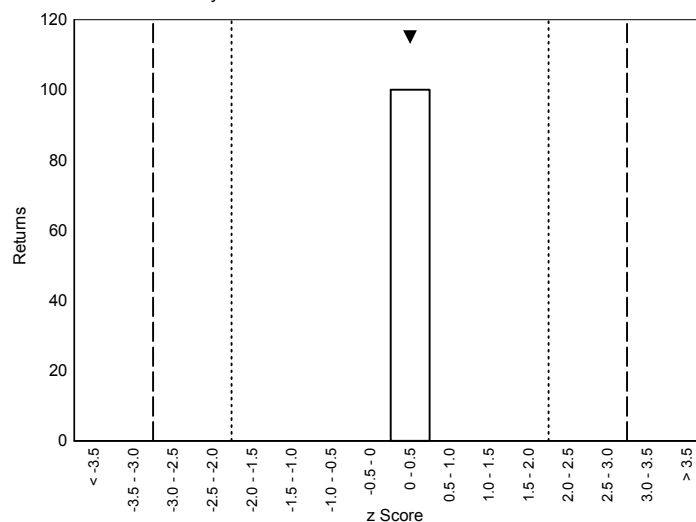
Percentage Values (%) - CD11c

Please note ▼ denotes your result



Percentage Values (%) - CD56

Please note ▼ denotes your result



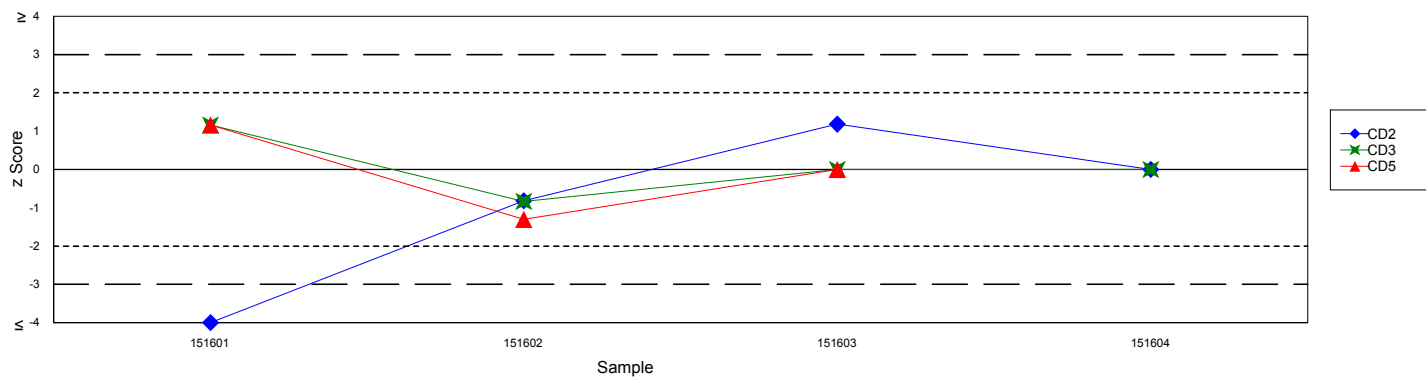
Leukaemia Immunophenotyping (Part 1) Programme

Sample - 151604

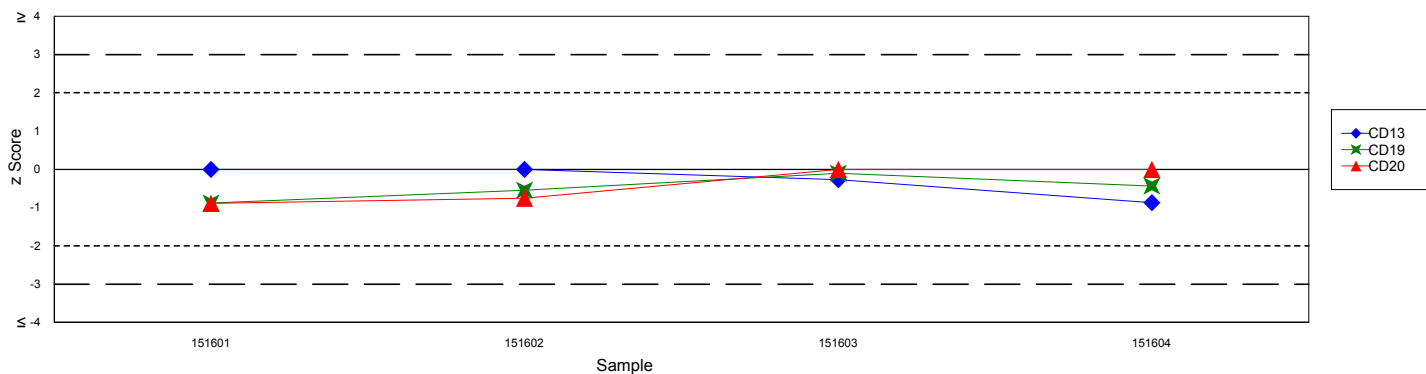
Shewhart Control Charts

(Please note each data point represents a single sample)

Percentage Values (%)



Percentage Values (%)



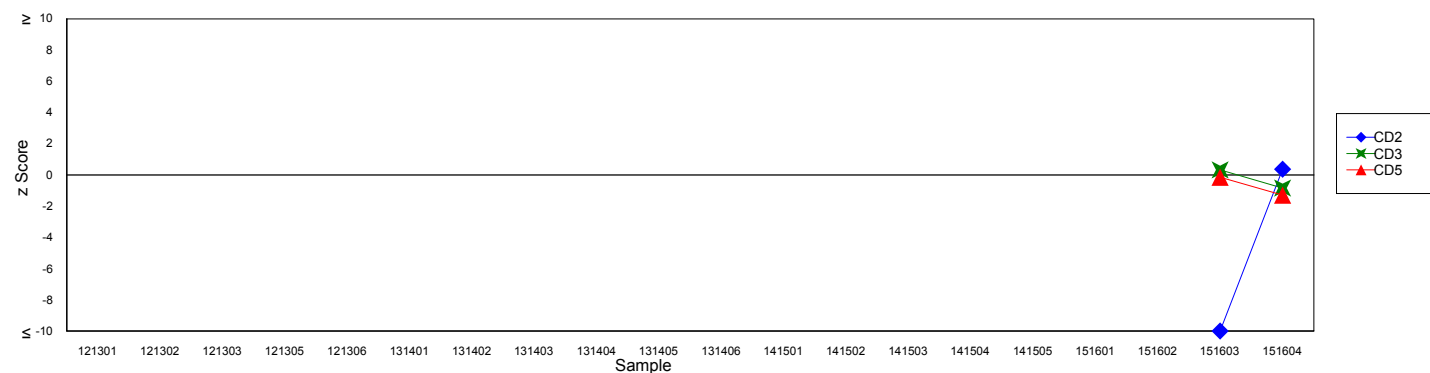
Leukaemia Immunophenotyping (Part 1) Programme

Sample - 151604

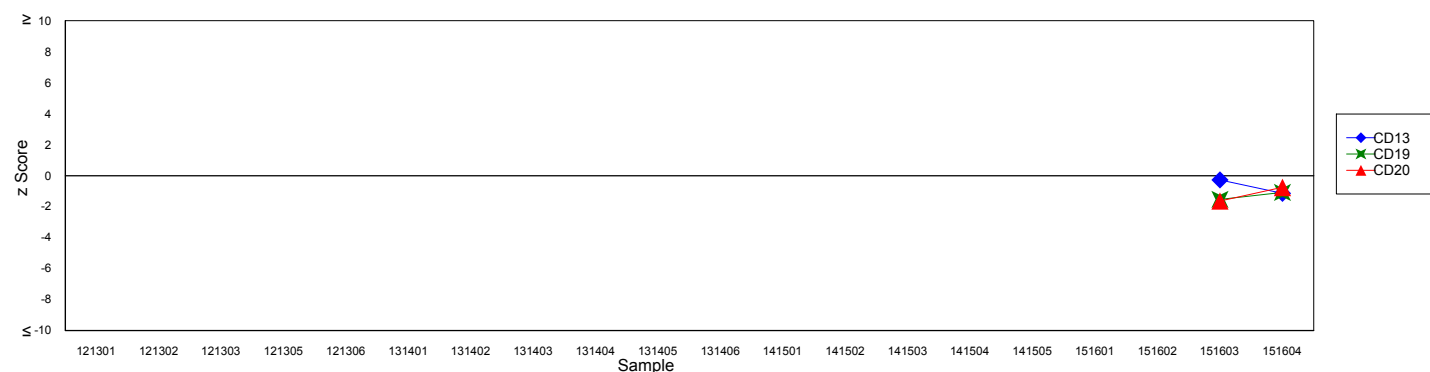
Cusum Control Charts

(Please note each data point represents the sum of the z scores of the current sample and the two previous samples)

Percentage Values (%)



Percentage Values (%)



Leukaemia Immunophenotyping (Part 1) Programme

Sample - 151604

Antibody Manufacturer Specific Statistics

(Please note only groups of >20 returns are displayed)

CD2			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	133	0.0	0.0
Beckman Coulter	84	0.2	0.2

CD3			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	134	0.0	0.0
Beckman Coulter	86	0.1	0.2

CD5			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	136	0.0	0.0
Beckman Coulter	83	0.3	0.3

CD10			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	122	0.0	0.0
Beckman Coulter	78	0.0	0.0

CD13			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	138	1.1	1.4
Beckman Coulter	81	1.4	1.5

CD19			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	114	14.9	8.3
Beckman Coulter	110	16.8	5.0

CD22			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	21	14.2	15.8

Leukaemia Immunophenotyping (Part 1) Programme

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Antibody Manufacturer Specific Statistics

(Please note only groups of >20 returns are displayed)

CD79a			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	79	0.0	0.0
Beckman Coulter	64	1.4	1.6
Dako	42	1.1	1.4

CD117			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	26	0.0	0.0

Myeloperox			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	20	0.0	0.0

TDT			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	56	0.2	0.2
Beckman Coulter	55	0.7	0.8
Dako	65	13.3	14.6

CD33			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	20	1.1	1.3

CD45			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	116	100.0	0.0
Beckman Coulter	78	100.0	0.0

CD34			
Percentage Values (%)			
Method	Returns	Robust Mean	Robust SD
BD Biosciences	139	0.7	0.7
Beckman Coulter	70	0.7	0.8

Leukaemia Immunophenotyping (Part 1) Programme

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Antibody Manufacturer Specific Statistics

(Please note only groups of >20 returns are displayed)

HLADR	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	116	98.5	1.4
Beckman Coulter	68	97.0	2.8

CD15	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	BD Biosciences	112	84.5	13.9
	Beckman Coulter	57	53.9	42.4

CD20	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	BD Biosciences	133	0.0	0.0
	Beckman Coulter	81	0.0	0.0

CD38	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	BD Biosciences	126	93.0	7.6
	Beckman Coulter	69	93.9	5.4

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Antibody Fluorochrome Specific Statistics

(Please note only groups of >20 returns are displayed)

CD2	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
APC		25	0.0	0.0
FITC		106	0.0	0.0
PE		48	0.0	0.0
PE-CY7		39	0.5	0.6

CD3	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	APC	38	0.0	0.0
	ECD	20	0.3	0.4
	FITC	53	0.0	0.0
	PerCP-CY5.5	20	0.0	0.0

CD5	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	APC	35	0.0	0.0
	FITC	54	0.5	0.6
	PE	36	0.0	0.0
	PE-CY7	34	0.0	0.0
	PerCP-CY5.5	35	0.0	0.0

CD10	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	APC	43	0.0	0.0
	FITC	28	0.0	0.0
	PE	92	0.0	0.0
	PE-CY7	32	0.0	0.0

CD13	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	PE	172	1.2	1.4

Leukaemia Immunophenotyping (Part 1) Programme

Sample - 151604

Antibody Fluorochrome Specific Statistics

(Please note only groups of >20 returns are displayed)

CD19	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	APC	29	16.9	4.7
	ECD	25	15.8	6.2
	PE	47	15.9	6.7
	PE-CY7	69	16.8	4.1
	PerCP-CY5.5	21	13.3	12.5

CD79a	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	APC	20	2.3	2.6
	PE	144	0.5	0.6
	PerCP-CY5.5	20	0.0	0.0

Myeloperox	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	FITC	36	1.4	1.6

TDT	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	FITC	173	1.6	1.7

CD45	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	APC-H7	25	100.0	0.0
	PerCP	24	100.0	0.0
	V450	32	100.0	0.0

CD34	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	APC	39	0.9	0.5
	FITC	25	0.1	0.2
	PE	49	0.9	0.8
	PE-CY7	22	0.0	0.0
	PerCP-CY5.5	35	0.7	0.8

Leukaemia Immunophenotyping (Part 1) Programme

Sample - 151604

Antibody Fluorochrome Specific Statistics

(Please note only groups of >20 returns are displayed)

HLADR	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	FITC	79	98.0	1.7
	PC5.5	34	95.8	4.4

CD15	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	FITC	135	85.1	13.5

CD20	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	APC	22	0.0	0.0
	FITC	63	0.0	0.0
	Pacific Orange	22	0.0	0.0
	PC5.5	27	0.0	0.0
	PE	32	0.0	0.0

CD38	Percentage Values (%)			
	Method	Returns	Robust Mean	Robust SD
	Alexa 750	28	91.0	10.8
	APC	36	93.0	7.2
	FITC	38	82.1	18.9
	PE	36	98.5	1.5
	PE-CY7	31	94.8	4.1

Information with respect to compliance with standards BS EN ISO/IEC 17043:2010

4.8.2 a) The proficiency testing provider for this programme is:

UK NEQAS for Leucocyte Immunophenotyping

Pegasus House, 4th Floor Suite

463A Glossop Road

Sheffield, S10 2QD

United Kingdom

Tel: +44 (0) 114 267 3600, Fax: +44 (0) 114 267 3601

e-mail: nicola.rose@ukneqasli.co.uk

4.8.2 b) The coordinators of UK NEQAS LI programmes are Prof David Barnett and Mr Liam Whitby.

4.8.2 c) Person(s) authorizing this report:

Prof David Barnett, Director or Mr Liam Whitby, Operations Manager of UK NEQAS LI

4.8.2 d) No activities in relation to this EQA exercise were subcontracted.

4.8.2 g) The UK NEQAS LI Confidentiality Policy can be found in the Quality Manual which is available by contacting the UK NEQAS LI office. Participant details, their results and their performance data remain confidential unless revealed to the relevant NQAAP when a UK participant is identified as having performance issues.

4.8.2 i) All EQA samples are prepared in accordance with strict Standard Operational Procedures by trained personnel proven to ensure homogeneity and stability. Where appropriate/possible EQA samples are tested prior to issue. Where the sample(s) issued is stabilised blood or platelets, pre and post stability testing will have proved sample suitability prior to issue.

4.8.2 l), n), o), r) & s) Please refer to the UK NEQAS LI website at www.ukneqasli.co.uk for detailed information on each programme including the scoring systems applied to assess performance (for BS EN ISO/IEC 17043:2010 accredited programmes only). Where a scoring system refers to the 'consensus result' this means the result reported by the majority of participants for that trial issue. Advice on the interpretation of statistical analyses and the criteria on which performance is measured is also given. Please note that where different methods/procedures are used by different groups of participants these may be displayed within your report, but the same scoring system is applied to all participants irrespective of method/procedure used.

4.8.2 m) We do not assign values against reference materials or calibrants.

4.8.2 q) Details of the programme designs as authorized by The Steering Committee and Specialist Advisory Group can be found on our website at www.ukneqasli.co.uk. The proposed trial issue schedule for each programme is also available.

4.8.2 t) If you would like to discuss the outcomes of this trial issue, please contact UK NEQAS LI using the contact details provided.